



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No.: 3630

SHIBATA et al.

Group Art Unit: 2811

Appln. No.: 09/885,046

Examiner: Hu, Shouxian

Filed: June 21, 2001

Title: GROUP III NITRIDE COMPOUND SEMICONDUCTOR DEVICE AND  
METHOD FOR PRODUCING THE SAME

07/30/2002 SSITHIB1 00000175 033975 09885046

July 29, 2002

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TECHNOLOGY CENTER 2800  
JUL 29 2002  
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AMENDMENT UNDER 37 C.F.R. §1.111

Hon. Commissioner of Patents  
Washington, D.C. 20231

Sir:

In reply to the Office Action dated April 10, 2002, the period for reply being extended by a Petition for One Month Extension of Time filed herewith, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

Page 2, delete the whole paragraph starting in line 19 and replace it with the following new paragraph:

a<sup>1</sup>

The temperature for growing the group III nitride compound semiconductor layer by a general metal organic chemical vapor deposition method (hereinafter referred to as "MOCVD" method) is, however, 1000°C or higher. On the other hand, the growth temperature of the low-temperature sedimentary layer is approximately in a range of from 400°C to 500°C. Hence, from cleaning the substrate to forming the undercoat layer (group III nitride compound semiconductor layer), the temperature of the substrate changes into high temperature (1000°C: cleaning of the substrate), low temperature (500°C: formation of the low-temperature sedimentary layer) and high temperature (1000°C: formation of the undercoat layer). It is necessary to repeat increase and decrease of the substrate temperature largely. It is therefore, a matter of course that a long time is required for production.